

**INTERNSHIP REPORT  
IN PT. COCA-COLA AMATIL INDONESIA BALINUSA**



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YOGYAKARTA  
2018**

## APPROVAL SHEET

Industrial Practice Report that has been held at PT. Coca-Cola Amatil Indonesia  
Balinusa Plant from July 3<sup>rd</sup> 2017 until August 5<sup>th</sup> 2017 written by:

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## **SURAT KETERANGAN**

**NO : 12/ TRN / CCAI / VIII / 2017**

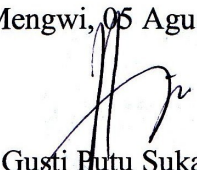
Yang bertanda-tangan dibawah ini, atas nama Management PT. Coca-Cola Amatil Indonesia Balinusa menerangkan bahwa :

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Memang benar melakukan Praktek Kerja Lapangan (PKL) di PT. Coca-Cola Amatil Indonesia Balinusa, yang berlokasi di Jl. Raya Denpasar Bedugul Km 21 Mengwi Badung sejak tanggal 03 Juli 2017 sampai dengan 05 Agustus 2017 dengan materi Demand Operational Planning, Logistic dan Supply Chain di PT. Coca Cola Amatil Indonesia Balinusa

Demikian surat keterangan ini dibuat untuk dapat dipergunakan sebagai mana mestinya.

Mengwi, 05 Agustus 2017

  
I Gusti Putu Sukarya  
SC Trainer

## PREFACE

Praise gratitude authors say to the God Almighty for His grace , so the autor's internship been done well for one month in PT. Coca-Cola Amatil Indonesia Balinusa and implementation of preparation of internship report completed on time.

The purpose of forming of internship report is one of the academic requirements that must be met in the lecture of Industrial Engineering Study Program, University of Atma Jaya Yogyakarta. In addition, the purpose of doing internship is to introduce the real work situation in a company to students before graduating from Industrial Engineering Study Program.

The completion of the internship report does not escape the help, motivation and participation of all parties, for that on this occasion the author would like to express appreciation and thanks to:

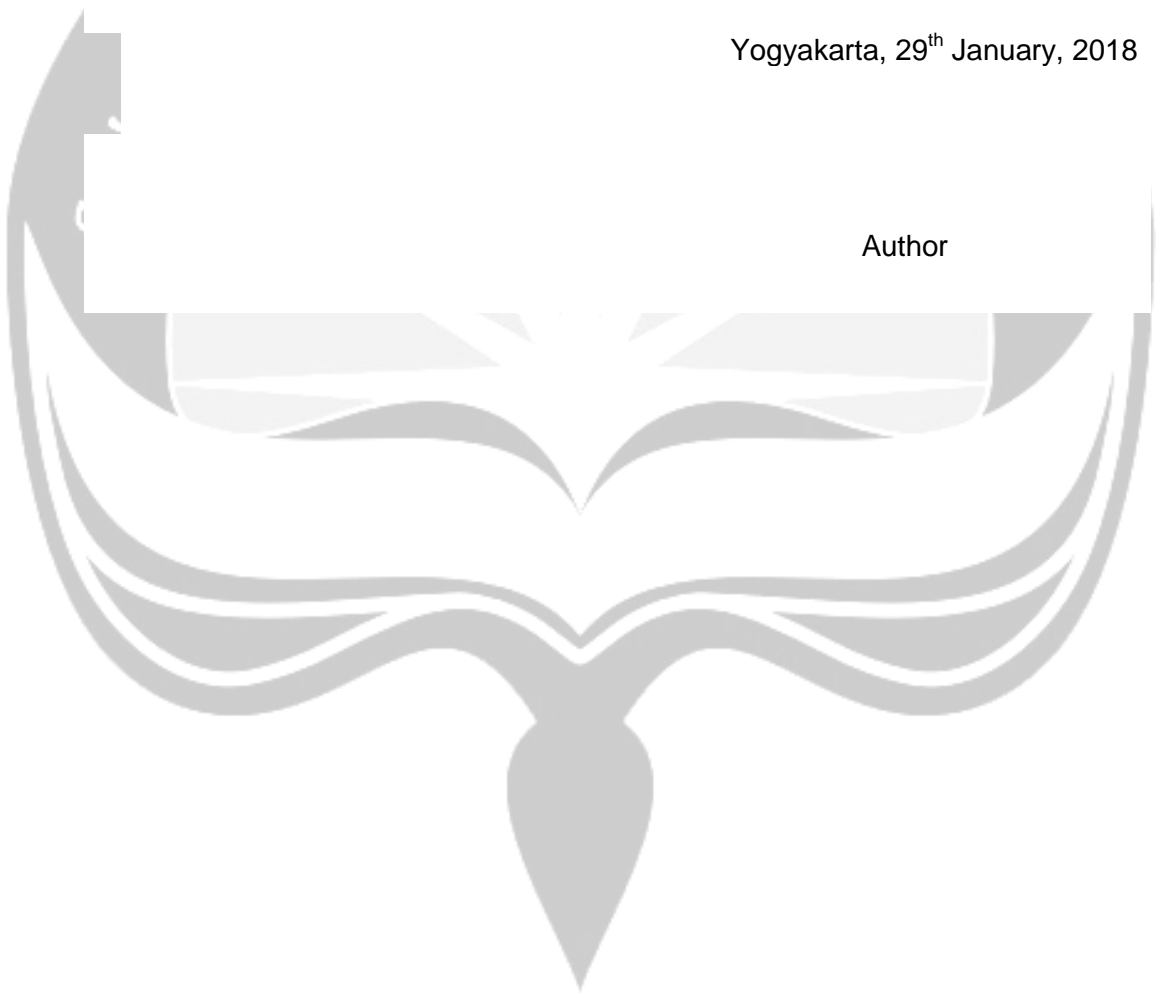
1. God Almighty who is always given strength and hope for the compiler in carrying out internship and preparation of reports.
2. 2.. Mr. V. Ariyono, S.T., M.T. As Head of Department of Industrial Engineering.
3. Ir. B. Kristyanto,M.Eng,Ph.D. As a lecturer guidance of Practice for his guidance during the implementation and preparation of Job Training Report.
4. Mr. I Gusti Putu Sukarya as SC Trainer and field supervisor during the implementation of internship at PT. Coca-Cola Amatil Indonesia Balinusa.
5. Mr. I Ketut Rika as field supervisor during the implementation of internship at PT. Coca-Cola Amatil Indonesia Balinusa
6. Mr. Aga as DOP manager related field supervisor at PT. Coca-Cola Amatil Indonesia Balinusa.
7. Mr. Komang Suyasa as Supervisor Raw Material and Inventory PT. Coca-Cola Amatil Indonesia Balinusa.
8. Mr. Gusti Putu Sukarsa as Supervisor Water Treatment Process, Making Syrup, and Waste Water Treatment Process PT. Coca-Cola Amatil Indonesia Balinusa.
9. Mr. Ngakan Putu Sunggana as Supervisor Quality Assurance PT. Coca-Cola Amatil Indonesia Balinusa.

10. Both parents and siblings who always support and give prayer during the implementation of internship and preparation of reports.
11. Friends who have provided motivation and passion during execution and preparation.
12. All employees of PT. Coca-Cola Amatil Indonesia Balinusa for the kinship that is established and always helps during internship.

The author realizes the preparation of this report is unperfect. To that end, the authors are looking forward to constructive criticism and suggestions from readers. The author expects this report to be useful to authors and all concerned parties.

Yogyakarta, 29<sup>th</sup> January, 2018

Author

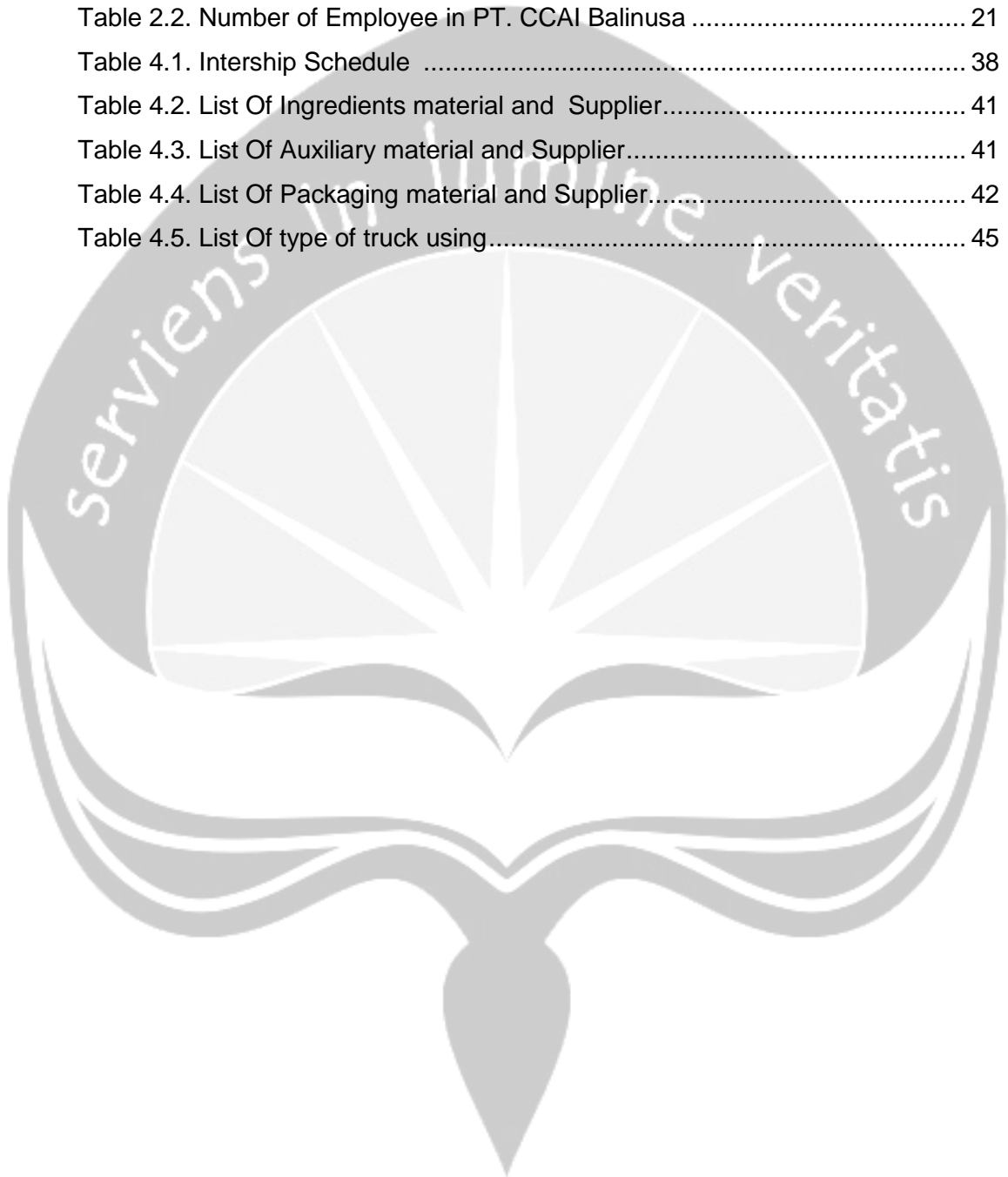


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Appendix 1. Job Training Valuation Sheet

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## CHAPTER 1

### INTRODUCTION

This section discusses about background and purpose of the implementation of practical work and an explanation of the place and time of practical work.

#### 1.1. Background

Industrial Engineering Program, Faculty of Industrial Technology, Atma Jaya University Yogyakarta (PSTI UAJY) requires all students to carry out practical work in accordance with the Curriculum in PSTI UAJY. The UAJY PSTI sees practical work as a vehicle or means for students to recognize the atmosphere in the industry as well as to grow, improve, and develop a professional work ethic as a candidate for Industrial Engineering graduate.

Practical work can be said as a means of simulation of industrial engineering students profession. The paradigm that should be inculcated is that during the practical work the students work in the company they choose. Work, in this case includes planning, design, repair, implementation and problem-solving activities. Therefore, in practical work activities undertaken by students are:

- a. Recognize the company's scope.
- b. Following the work process in the company continuously.
- c. Perform and perform tasks assigned by superiors, supervisors or field counselors.
- d. Observe system behavior.
- e. Compile reports in written form.
- f. Carry out the practical work exams.

Industrial Engineering is a branch of engineering that deals with the planning, design, improvement and installation of integrated systems comprising human, machinery, materials, information, energy, work methods and financial resources or briefly reviewing industrial systems. In particular, within the scope of Industrial Engineering it must be always realized that what is studied is the unity of the system elements consisting of Human, Machine, Material, Method, Money, Energy, Environment and Information. That is, in carrying out the activities under his responsibility, the Bachelor

of Industrial Engineering should always view his activities within the framework of the system surrounding the activity.

Competencies held by students and Industrial Engineering graduates include:

1. System Design Work and Ergonomics.
2. Production Planning and Control.
3. Inventory / Inventory Management.
4. Quality Control System.
5. Material Handling System.
6. Logistics and Supply Chain Management.
7. Product Design and Development.
8. Occupational Safety and Health Techniques.
9. Design of Manufacturing Facility Layout.
10. Organizational Management.
11. Cost Analysis.
12. Industry Feasibility Analysis.
13. Process Design and CAD / CAM, and others.

### **1.2. Purpose**

Things to be achieved through the implementation of this practical work are:

Practicing self-discipline.

- a. Train the ability to interact with subordinates, coworkers, and bosses within the company.
- b. Train the ability to adapt to the work environment.
- c. Directly observe the company's activities in producing and running a business.
- d. Complete the theory obtained in lectures with the actual state of existence in the factory.
- e. Add insight into production systems and business systems.

### **1.3. Place and Time Of Internship**

This Practice Work will be implemented as of July 13, 2017 until August 05, 2017 at PT. Coca Cola Amatil Indonesia Balinusa Unit. In this practical work the author is placed in the Department of Demand Operational Planning, *Logistic and Supply Chain* in accordance with student competence. However, the practical work participants were also given a schedule and placed in each department other than the selected department, in order to know thoroughly the operations in PT. Coca Cola Amatil Indonesia Balinusa Unit.



## CHAPTER 2

### COMPANY OVERVIEW

In this section discussed about the history, corporate organizational structure and management contained in PT. Coca-Cola Amatil Indonesia Balinusa.

#### **2.1. Company Brief History**

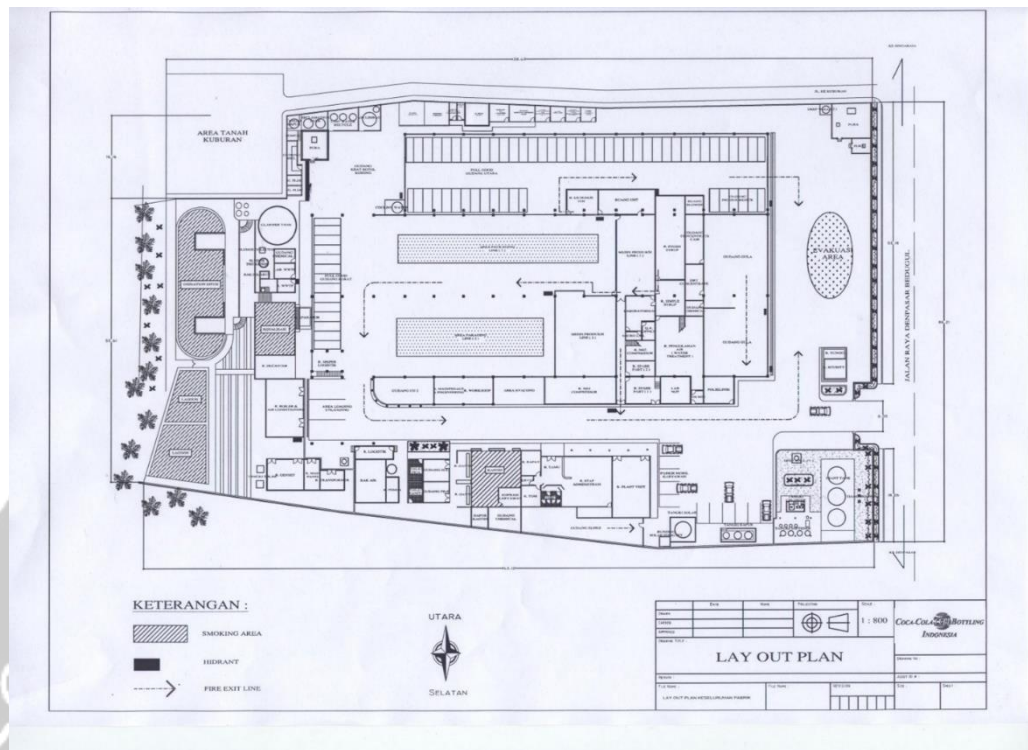
In this section will be discussed about the location or relocation of the company, the development of the company and the resulting product, certification or company achievement, company uniqueness and many others.

##### **2.1.1. Company Location**

Bottling plant of PT. Coca-Cola Amatil Indonesia (CCAI) Balinusa branch is located at Jl. Raya Denpasar-Bedugul KM. 21. Sayan Baleran Village, Werdi Bhuwana Village, Mengwi Sub-district, Badung Regency, Bali. The office located at Jl. Nangka No.196 Denpasar.

The CCAI Balinusa factory has an area of 10,952 sqm with the following details:

- A. Main plant building: 2509 m<sup>2</sup>*
- B. Plant covered warehouse: 2140 m<sup>2</sup>*
- C. Plant office & social facilities: 566 m<sup>2</sup>*
- D. Utility equipment building: 1353 m<sup>2</sup>*
- E. Open empties yard: 4379 m<sup>2</sup>*



**Figure 2.1. Layout Coca-Cola Amatil Indonesia Balinusa**

### 2.1.2. History of Coca-Cola

PT.Coca-Cola Amatil Indonesia is a soft drink product known as soft drink. Coca-Cola's growth as a soft drink has made it a popular soft drink brand worldwide. The history of Coca-cola was discovered by a pharmacist from Atlanta, Georgia, USA. John Styth Pemberton on May 8, 1886. John Styth Pemberton makes colored caramel syrup in a brass kettle in his back garden. Coworkers and business finance officers. Pemberton, Frank M. Robinson in 1887, suggested to use the Coca-Cola writing with the current flowing letters known throughout the world. Before Dr. J.S Pemberton died in 1888, leaving his inventions to Assa Candler an expert manager, then in 1892, he founded a company called PT. Coca-Cola Company in Atlanta, United States which is now the headquarters of Coca-Cola worldwide. Over the course of time Coca-cola is growing and popular with people. Seeing these conditions came the idea of Joseph Beidenharn to bottle Coca-cola.

Coca-cola bottling plant was founded in 1899, the factory bought Coca-Cola Concentrate from The Coca-Cola Company, then processed the ingredients with clean

water, pure sugar and CO<sub>2</sub> gas to become Coca-Cola's later drink Packed in bottles. Besides Root Glass Co. In Indiana, creating a typical Coca-Cola bottle, easily recognizable both from sight and touch. The bottle now follows its original form despite having changed. Since 1900 Coca-Cola's distribution has been convincingly expanding abroad. In 1907 the construction of bottled Coca-cola bottling factories abroad began to be intensified. This development is done by using the franchise system is a system of cooperation between two mutually beneficial companies, although both are completely separate capital, ownership and management.

In 1930, The Coca-Cola Export Corporation was established to build overseas concentrate plants and guide Coca-cola bottlers throughout the world. All the Coca-Cola bottling factories in the world stand independently of The Coca-Cola Company or Coca-Cola Export Corporation, but they also have the same taste, quality as they work according to terms, recipes And techniques specified by The Coca-Cola Company. It is also closely monitored by The Coca-Cola Export Corporation.

### **2.1.3. History of Coca-Cola in Indonesia**

Coca-cola was introduced in Indonesia in 1927. In 1932 Coca-Cola began trading first in Indonesia by "De Nederlands Indische Minerals Water Fabrick" in Jakarta under the management of Bernie Vonings of the Netherlands. After the proclamation of Indonesian independence in 1953 the company changed its name to Indonesian Beverages Limited (IBL) managed by Indonesian people. IBL has many difficulties in producing Coca-cola it is caused:

- a. The import of raw materials and supporting materials is strictly limited.
- b. There is a confrontation with outsiders (relationship abroad).
- c. Lack of enough capital to develop the factory.
- d. Production capacity is only 500 chests per day.
- e. There is often a dead electric current, so the production stops.
- f. Difficult to get a dividend because Coca-Cola is still considered luxury goods.
- g. In Indonesia it is difficult to obtain raw materials and supporting materials in accordance with the standards set by Coca-Cola Export Corporation.

To overcome the problem then in 1971 IBL cooperated with three Japanese companies namely Mitsui Toatsu Chemical Inc., Mitsui & Co. Ltd., and Mikuni Coca-

Cola Bottling Co. So as to form PT. Djaya Beverages Bottling Company (DBBC). PT. DBBC succeeded in increasing the production capacity followed by the addition of various products in various packaging sizes. Besides producing Coca-Cola drinks also develop other soft drink products such as Sprite and Fanta in a variety of flavors.

Besides PT. DBBC in some areas also established Coca-cola bottling plant so that in 1972 Coca-Cola Export Corporation established its representative in Indonesia named PT. Coca-Cola Indonesia (PT.CCI). PT.CCI has supplied concentrate to existing bottling plants in Indonesia, among others PT. Coca-Cola Tirtalina with marketing area of Bandung, Surabaya, Kalimantan, and Bali. PT. Coca-Cola Pan Java with marketing locations in Semarang, Medan, Padang, Lampung, and Ujung Pandang and PT. DBBC with Jabotabek marketing area. The brighter business development caused in 1987 the majority of shares have been owned by the people of Indonesia. On October 12, 1993, an Australian factory which is the largest company in the world provides investment for fabrication, distribution and marketing of products. In 1993 all three bottling plants were taken over by Coca-Cola Amatil (CCA), Australia. The Coca-Cola Company took over the ownership of DBBC and changed its name to Coca-Cola Amatil Indonesia.

To date there are 10 Coca-Cola Company factories operating in various provinces in Indonesia, including:

- a. PT. Coca-Cola Amatil Indonesia, Jakarta.
- b. PT. Coca-Cola Amatil Indonesia, Jawa Barat.
- c. PT. Coca-Cola Amatil Indonesia, Jawa Tengah.
- d. PT. Coca-Cola Amatil Indonesia, Jawa Timur.
- e. PT. Coca-Cola Amatil Indonesia, Balinusa.
- f. PT. Coca-Cola Amatil Indonesia, Lampung.
- g. PT. Coca-Cola Amatil Indonesia, Padang.
- h. PT. Coca-Cola Amatil Indonesia, Medan.
- i. PT. Coca-Cola Amatil Indonesia, Banjarbaru.
- j. PT. Coca-Cola Amatil Indonesia, Ujung Pandang.

In 1995 Coca-Cola Amatil belongs to Australia which is the world's largest bottling company for fabrication, distribution, and product marketing. The Coca-Cola Company takes over all the Coca-Cola Company bottling plants in Indonesia except Manado.



The development of this beverage company is very fast. When The Coca-Cola Company improves efficiency and competitiveness, on January 1, 2000, the ten Coca-Cola bottling and distribution companies under Coca-Cola Amatil Indonesia management changed their name to PT. Coca-Cola Bottling Indonesia for bottling companies and PT. Coca-Cola Distribution Indonesia for distribution companies. Nationally on July 1, 2002, PT. Coca-Cola Amatil Indonesia changed the name of the Company to PT. Coca-Cola Bottling Indonesia with the hope especially to strengthen the image of the company as a manufacturer and distributor based locally in Indonesia which markets the leading beverage products. However, at the beginning of 2010 PT. Coca-Cola Bottling Indonesia is back to PT. Coca-Cola Amatil Indonesia in accordance with the decision of the President Director. Coca-Cola began to enter Bali in 1975 through the Surabaya branch. At that time there was only one stock point / marketing and distribution office. With the growing market share of Coca-cola, especially in Bali, the bottling plant was founded in Mengwi in 1983. Cocinata Bottling Indonesia's head office (CCBI) Balinusa unit is located at Jl. Jackfruit no. 196, Denpasar.

#### **2.1.4. The Products**

PT. Coca-Cola Amatil Indonesia is a manufacturing company engaged in the manufacture of beverages in bottles / can. PT. Coca-Cola Amatil Indonesia produces four categories of beverages with 14 trademarks, in Table 2.1. The following are the different types of beverages produced by this company:

**Tabel 2.1. 14 Trademarks in PT. Coca Cola Amatil Indonesia**

No.	Market Brand	Category
1.	Coca-Cola	Sparkling Beverage
2.	Coca-Cola Zero	
3.	Diet Coke	
4.	Sprite	
5.	Fanta	
6.	A&W	
7.	Schweppes	
8.	Minute Maid Pulpy	Still Beverage (Tea, Juice, Isotonic)
9.	Nutriboost	
10.	Frestea	
11.	Powerade	
12.	Aquarius	
13.	Ades	Water
14.	Burn	Energy Drink

Source: PT.Coca Cola Amatil Indonesia

#### **2.1.5. Company Achievement**

PT. Coca-Cola Amatil Indonesia has received various achievements and awards from various fields including the following:

- a. *Product Quality: "HALAL" Certificate from MUI*
- b. *BETTY Award Q-2 in 2005*
- c. *BETTY Award Q-3 in 2005*
- d. *BETTY Award Q-4 in 2005*
- e. *ANNUAL QUALITY AWARD in 2005*

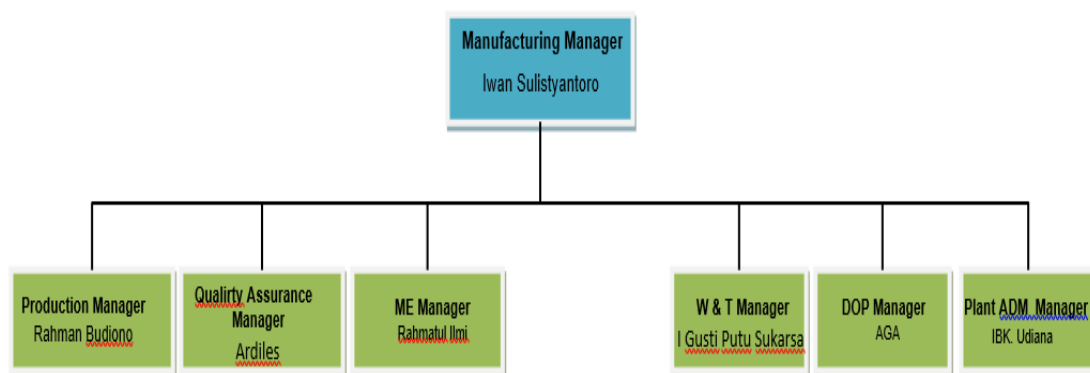
- f. ANNUAL QUALITY AWARD in 2007
- g. CCBI website ([www.coca-colabottling.co.id](http://www.coca-colabottling.co.id)) Awarded as one of The Best Corporate Website (2003-2004)
- h. System Implementation: TCCQS Phase III Plant Certification
- i. ISO 14001 Plant Certification
- j. Golden Flag Plant in SMK3
- k. ZERO ACCIDENT Award Plant
- l. Double Winner Engineering Award in 2006

## 2.2. Organization Structure

In this section will be discussed about the organizational body and job description of each department or section.

### 2.2.1 Organization Structure of Company

The organizational structure is a description of the division of tasks and responsibilities to individuals as well as certain parts of the organization. This organizational structure has a very important role in determining and facilitating the way the wheels of the company. The organizational structure can describe the distribution of tasks, powers, and responsibilities and relationships with each other, so that employees and employees can clearly know what the task is and the source it gets the order and to whom it should be responsible. With the organizational structure and job descriptions that have been established will create a good working atmosphere because the orders received by a subordinate of his boss will not overlap with the command of the other boss to subordinates.



**Figure 2.2. Organization Structure PT. Coca-Cola Amatil Indonesia Balinusa**

### **2.2.2. Job description**

Job description of each position at PT. Coca-Cola Amatil Indonesia in general can be as follows:

#### **a. *Technical operation manager***

i. Responsible:

1. Organize, coordinate, and be responsible for all production activities from planning to the products produced in accordance with the rules and procedures specified.
2. Controlling and directing budget usage in all production activities and in meeting cost and quality standards and procedures.
3. Direct and ensure all materials, that the company's assets have been used and improved properly to support the application of the target and the use of raw water to the maximum.
4. Direct and ensure all raw water / material and finished good have been stored well and safe and distribution to all sales center.
5. Directing and ensuring the production has met the quality standards that have been determined.
6. Direct and ensure that QMA, EMS, and OHS are implemented in accordance with the requirements.

ii. Authority:

1. Controlling and managing all activities in the plant.
2. Controlling the annual budget of production activities.
3. Assess the work of subordinates.
4. Giving permission / leave like a subordinate.
5. Provide verbal and written warnings.

#### **b. *Manajer quality assurance***

i. Responsible:

1. Responsible for the quality of all raw materials and maids entering the plant meet the quality standards set by the company and Coca-Cola Indonesia.

2. Responsible for product quality contained in warehouse SC (Sales Center) and dister / outlet.
3. Responsible to assist and respond to complaints (consumer respond program) delivered by consumers.
4. Responsible for control and monitoring activities during production processes and ready-to-sell products to meet the standards in accordance with TCCQS, ISO 14001 and SMK3 requirements.
5. Responsible as a quality journey member for the implementation of TCCQS, ISO 14001 and SMK3 systems.

ii. Authority:

1. Arrange work schedules for working groups.
2. Assess the work of subordinates.
3. Reprimand employees when they see something that does not fit both materials, processes, behaviors, and products related to quality
4. Stopping the production process in case of out of spec.

**c. Supervisor**

i. Responsible:

1. Incoming Test Activity

Prepare and supervise when inspecting the quality of all auxiliary raw materials that enter into the plant and selecting and determining that all raw materials received can meet the standard quality set by the company.

2. External Activity

Conducting surveys and monitoring of product quality that has been distributed to SC / CP warehouse and dister / outlet (market place), serving and responding to complaint (consument response program) related to product quality delivered by consumers and customers.

3. Internal activity

4. Carries out control and monitoring activities during production processes and ready-to-sell products and products to meet quality standards as per TCCQS, ISO 14001, and SMK3 requirements.

ii. Authority:

1. Organize work schedules for working groups.
2. Assess the work of subordinates.
3. Reprimand employees if they see non-conformity with material, process, behavior, and product related to quality.
4. Stopping the production process in case of out of spec.

**d. Operator**

i. Responsible:

1. Checking the quality of raw materials and auxiliary materials upon arrival (incoming material).
2. Checking the quality of all water either raw water, softwater / processed water before, during, and after the bottling / production process takes place.
3. Checking the syrup inspection process (check color, smell, taste, brix, and concentrate authenticity).
4. Inspect the quality of washing of bottles and yields before, during, and after the bottling / production process takes place.
5. Checking the quality date coding (expired date) code on every product packaging during the production process takes place.
6. Inspect the quality of the sanitary processes of all equipment related to the product.
7. Conduct quality check of sanitation and hygiene implementation in bottling and packaging room.
8. Inspect the quality of finished product beverage on CO<sub>2</sub> content of gas volume, sugar (brix), odor, taste, and color and addition during the bottling process.
9. Conduct quality inspection of raw materials, gas, CO<sub>2</sub> →, and monitoring of CO<sub>2</sub> gas quality during production
10. Checking the quality of crimping crown, filling height, and the product during the bottling process.
11. Conduct microbiological checks according to microbiological monitoring program on Q-Bulletin 24 and Q-Bulletin 49.
12. Conduct inspection / quality survey of products that have been distributed to warehouse SC / CP and dister / outlet (market place).

ii. Authority:

1. Stopping the production process in case of out of spec on material / process.
2. Reprimand employees if they see non-conformity with material, process, and behavior related to quality.

**b. Logistic Manager**

i. Responsible:

1. Implement standard policies, strategies, and business and transportation procedures (including good warehouse practice).
2. Applying business warehousing and transportation ops.
3. Provide regular monitoring of conformity results for WT manager national office.
4. Developing various analyzes of warehousing and transportation formation and communicating and integrating feedback to related parties.
5. Identify driving performance and opportunities for improvement.
6. Organizing and integrating all work-related functions as one team constantly improves performance warehousing and transportation along with their suitability levels.

ii. Authority:

1. Arrange work schedules for working groups.
2. Assess the work of subordinates.
3. Giving obeisance to subordinates.

**c. Supervisor logistic**

i. Responsible:

1. Ordering, receiving, storage / discharging of raw materials, maid, chemical, and spare part in accordance with applicable SOP.
2. Ensure the accuracy of the availability of auxiliary raw materials, chemical, and spare parts in accordance with the need to support the production process.
3. Make periodic reports of materials and spare parts to direct supervisors.
4. Responsible for coaching and developing subordinates to improve the ability and potential work.

ii. Authority:

1. Arrange work schedules for working groups.

2. Assessing subordinate results.
3. Give a reprimand to subordinates.

**d. Implementation of Logistic RM & SP**

i. Responsible:

1. Responsible for acceptance, storage, and disposal of materials and spare parts in accordance with applicable SOP.
2. Registration of material and spare part data to direct supervisor.

ii. Authority:

1. Refuse material and spare parts if not in accordance with SOP.

**e. Implementation of material logistic**

i. Responsible:

1. Produce a complete stock report, neat, and guaranteed accuracy (conformity of stock balance with physical evidence).

ii. Authority:

1. Revise the report if it is not correct.

**f. Implementation of bottle logistic**

i. Responsible:

1. Doing loading, unloading, moving to a place to store / return stock contents / empty, raw material, and machine spare parts so that it is arranged neatly and the quality can be maintained in accordance with the standards set by the company.
2. Ensure the smooth operation by paying attention to the quality, layout, and storage procedures as well as effective / efficient both from the time and use of fuel.

ii. Authority:

1. Stop forklift operation if forklift condition is less standard.

**g. Maintenance and Engineering Manager**

i. Responsible:

1. Ensure all production and supporting facilities are functioning properly.



2. Upon maintenance of the building, room, and factory environment in accordance with the standards specified in the GMP manual.
3. Coordinate verbally and in writing with other parts of TOL in performing machine machinations.
4. Ensure saving of electricity usage through effective control over its usage.
5. For coaching and developing subordinates to improve the ability and potential work.

ii. Authority:

1. Arrange work schedules for working groups.
2. Assess the work of his subordinates.
3. Give a reprimand to subordinates.

**h. Supervisor ME**

i. Responsible:

1. Arrange RK maintenance in maintenance / maintenance of machine in Production line and utility according to standard MMS (schedule maintenance).
2. Coordinate verbally and in writing with other parts of the factory in performing machine maintenance.
3. For coaching and developing subordinates to improve the ability and potential work.
4. Ordering spare parts & tools required.
5. Provide a report on the condition of the machines in production and utility.
6. Improve the performance of production line machine both mechanical and electrical with the cost as optimal as possible.
7. Performs calibration of all measuring tools.

ii. Authority :

1. Arrange work schedules for working groups.
2. Assess the work of his subordinates.
3. Give a reprimand to subordinates.

**i. Executing of *utility* supervisor**

i. Responsible:

1. Performing and replacing lubrication on production line and utility line using oil / grease in accordance with predefined standards with the purpose of smooth all mechanical parts of machine.
2. Conducting oil and grease management in accordance with GMP and ISO 140001.
3. Do preventive maintenance according to schedule.
4. Maintain smooth conveyor nozzle lubrication in production line.
5. Repairing small factory / office buildings to improve GMP standard.
6. Repairing water and sewage installation systems in toilets, washtable, WT, syrup, manufacturing, WWTP, office, eastern warehouse, production line, laboratory and washtafel.

ii. Authority:

1. Stopping the machine operation if the lubricating system is not run according to the procedure.

**i. Executing of *line maintenance* supervisor**

i. Responsible:

1. Carry out preventive maintenance electric that has been issued by MMS to ensure the smooth line of production and utilities.
2. Carry out repair / corrective maintenance electric line production & utilities so that can be operated smoothly.
3. Carry out electric work in project and workshop when needed.

**j. Executing of *MMS* supervisor**

i. Responsible:

1. Carry out calibration in accordance with TCCQS specified standards.
2. Create calibration schedules and carry out routinely.
3. Choosing a good measuring instrument in accordance with the needs in the production line and utility.
4. Maintain tools used for calibration in accordance with TCCQS.

5. Maintain the accuracy of all measuring instruments (thermometer, pressure, gauge, and flowmeter).
6. Monitor the calibration and create a calibration report to be performed by a third party.

ii. Authority:

1. Define the calibration schedule.
2. Reject calibration transactions with external parties if not in accordance with procedures.

**k. Production administration**

i. Responsible:

1. Record daily, weekly, and monthly production reports correctly.
2. Helps to achieve the program.

**l. Operator filler**

i. Responsible:

1. To operate and supervise the mixing unit and filler machine to achieve targeted quality, efficiency, and productivity.
2. Controlling the engine condition from interference, handling the engine that causes the reject, and smoothing machine operation.
3. Implementing good manufacture practice on operated machines.
4. Responsible for material requirements according to procedure.

ii. Authority:

1. Stopping the production process when out of spec on process and disturbance on the machine.

**m. Operator WWTP**

i. Responsible:

1. Conducting wastewater treatment process to meet the quality standard requirements set by the regulation.
2. Preparing materials / chemicals for the process of wastewater use.
3. Monitor waste water analysis and during the process.
4. Carry out GMP in the waste process area.
5. Recording and reporting on wastewater treatment.

ii. Authority:

1. Stopping the process if any waste process deviates from the standard.

**n. *Helper WWTP***

i. Responsible:

1. Preparing chemical for WWTP.
2. Move the sludge from the decanter processing to the solid waste collection area of the plant.
3. Cleaning in the WWTP area.
4. Maintain the quality of waste water in accordance with the standards.

ii. Authority:

1. Stops the WWTP process when the process is steamed from the standard.

**o. *Administration and security***

i. Responsible:

1. Update the validity period of the company's permits.
2. Ensure cleanliness of the administration area (GMP area admin).
3. Optimizing the function of employee facilities (canteen, change room, and plantvisit).
4. The arrangement of Mengwi plant documents.
5. Issued a drikage for employees.
6. Coordination of housekeeping implementation.

**p. *Executing of Human Resource Departement***

i. Responsible:

1. Ensure the work situation and the office environment is guaranteed security and smoothness.
2. Conduct examination of employees / guests entering and exiting the factory to ensure the safety and assets of the factory.
3. Describes the company's rules to incoming guests.
4. Control all areas of the plant to ensure safe conditions.

ii. Authority:

1. Reprimand the guest employee in violation of procedures established by the company

**q. Executing**

i. Responsible:

1. Receive documents on outgoing / incoming transactions of goods and distribute to related sections.
2. Make payments of salary and overtime karyawan and control of employee absenteeism.
3. Receive phone / fax from outside and connect telephone / fax out to employees in the framework of full interest.

ii. Authority:

1. Entering data overtime if it is valid.
2. Maintain company code of ethics and communicate with internal / external parties.

**r. OHS manajer**

i. Responsible:

1. Ensure the requirements of SMK3 have been implemented and maintained for its sustainability.
2. Ensures customer expectations and conformity with OSH legislation.
3. Observe compliance with K3 TOL through audit.
4. Participate in determining aspects of K3 in TOL on business planning.
5. Ensure continuous improvement of OHS management system at TOL.
6. Assist in prevention and non-conformity and ease in the improvement of business activities.

ii. Authority:

1. Directly implement the requirements of SMK3 and company policy through audit, review, consultation, and training.

### 2.3. Company Management

This section will describe the description of vision and mission, company values, employment, marketing, and facilities.

#### 2.3.1. Vision and Mision of Company

##### a. Vision

Vision of PT. Coca-Cola Amatil Indonesia is: "Being the best beverage manufacturer in Southeast Asia".

##### b. Mision

Mission PT. Coca-Cola Amatil Indonesia is "Serving, providing freshness and energy to customers and consumers vigorously every time, every day".

#### 2.3.2. Employment

##### a. Employee

Permanent workers who work in PT. Coca-Cola Amatil Indonesia Balinusa branch is 119 people.

The company's workforce is divided into 14 departments. Details of total workforce at PT. Coca-Cola Amatil Indonesia can be seen in table 2.2 below.

**Table 2.2 Number of employee in PT. CCAI Balinusa**

No.	Job Title	Number Of Employee
1.	<i>Production Plant Manager</i>	1
2	<i>Production Team Leader</i>	1
3	<i>General Affair Manager</i>	1
4	<i>Production Manager</i>	1
5	<i>Operation Supply Planner Manager</i>	1
6	<i>Quality Assurance Manager</i>	1
7	<i>Productivity Improvement</i>	1

**Continue Table 2.2**

8	<i>EMS Officer</i>	1
9	<i>Learning Officer</i>	1
10	<i>Distribution Planner</i>	1
11	<i>Maintenance &amp; Engineering System Planner</i>	1
12	<i>Inventory Administrator</i>	6
13	<i>Quality Assurance Analyst</i>	7
14	<i>Maintenance &amp; Engineering Technician</i>	10
15	<i>Supervisor</i>	11
16	<i>Line crew</i>	23
17	<i>Operator</i>	45
18	<i>Forklift Operator</i>	5
20	<i>Administrator</i>	1

**b. Working Hours**

In order for workers to work well in performing their duties, it is necessary to set a good working time. Working hours set by PT. Coca-Cola Amatil Indonesia is 40 hours a week, the rest is considered overtime. Working time is six working days for permanent employees and outsourced employees. Each shift has a working time of eight hours in a day except on Saturdays each shift only works six hours a day.

Employees working in the production and waste water treatment process work based on shifts, where one shift is seven working hours with one hour of rest time, with the following:

- a. Shift 1: 07.00-15.00, rest period at 12.00-13.00
- b. Shift 2: At 15.00 to 23.00, the break time is 18.00 to 19.00
- c. Shift 3: 23.00-07.00 rest time at 02.00-03.00

On Saturday, the division of labor shifts in the production and waste water treatment process is also done into three parts:

- a. *Shift 1*: At 07.00-13.00
- b. *Shift 2*: At 13.00-19.00
- c. *Shift 3*: At 19.00-01.00

The workers who work on shift above, they get a break for one hour. While for office worker staff, their working hours are:

- a. At 08.00-12.00 WIB: work time.
- b. At 12.00-13.00 WIB: rest time.
- c. At 13.00-16.00 WIB: work time.

On Saturday, office staff hours from 08:00 to 12:00, 12:00 to 13:00 break, and then at 13:00 time home.

Working hours for water treatment and syrup making employees come in an hour earlier than the employees of the production and employees of the waste water treatment process. Here's the sharing:

- a. *Shift 1*: At 06.00-14.00, rest time at 12.00-13.00
- b. *Shift 2*: At 14.00-22.00, rest time at 18.00-19.00
- c. *Shift 3*: At 22.00-06.00, rest time at 02.00-03.00

On Saturday, the shift division of water treatment and syrup making employees is also done into three parts:

- a. *Shift 1*: At 06.00-12.00
- b. *Shift 2*: At 12.00-18.00
- c. *Shift 3*: At 18.00-00.00



Each shift will experience a turnover of work hours every week. The rotation of working hours or shifts is done in accordance with policies that have been regulated by PT. CCAI Balinusa. For the first week the employee enters the morning shift, the second week the employee moves the night shift, the third week the employee enters the afternoon shift and the fourth week the employee returns to the morning shift. If employees want to exchange shifts outside of a predetermined schedule, they can coordinate between employees in one section. Turnover schedule of working hours or shift is intended so that employees are not saturated with his job.

During big holidays such as Idul Fitri or Christmas, workers who will be on duty will be scheduled a minimum of a week before the holiday arrives. The maximum employee overtime per day is three hours on weekdays (workdays), with the maximum overtime time per week being 14 hours. For holidays the maximum overtime time is 23 hours.

The standard work time set by the Department of Labor is 40 working hours per week. PT. CCAI Balinusa sets a working standard of 46 working hours per week because the employee working hours is the right of the employer and the employee must follow the terms. If working hours exceed working hours that have been set, then workers will get overtime payments beyond the base salary. For tariffs and calculations of overtime, guided by applicable rules and regulations. To spur employee performance, the company provides sales and incentive commissions to its employees. Workers who perform well and have a good working reputation will have the opportunity to be promoted to a higher position and will be rewarded in the form of money shopping vouchers.

### **c. Wage System**

Salary / wage is an acceptance in return for the work of the employee for the work done which is assessed in the form of the agreement and the law. Many ways / wage payment system / salary used by the company. Each company has different ways of wages. On the basis of the system will bring good luck to the company without harming the workforce or employees.

Wages system at PT. CCAI Balinusa differentiated above:

- i. For monthly workforce or honorarium receive monthly salary every 25th day for general manager office. Accounting Department and Human resource.

ii. For the daily worker receives two weeks salary for salesman marketing and production managed by the cooperative. For every worker who is outside the normal hours will be given wages with the following provisions:

1. Wages of permanent labor.
2. Overtime wages are basic salary / 173 x number of overtime hours.
3. Wages of freelance and salaries.
4. Overtime pay  $2/30$  x the amount of overtime work.

The determination of hourly overtime pay is as follows:

1. For a normal day.
2. First overtime hours:  $1.5 \times$  wages / hour.
3. The rest of the hour:  $2 \times$  wages / hour.
4. For Saturdays / holidays.
5. The first seven hours:  $2 \times$  wages / hour.
6. The 8th hour:  $3 \times$  wages / hour.
7. Hours 9 and so on:  $4 \times$  wages / hour.
8. In addition to get overtime pay, labor to get food money, and extra fooding in the form of instant noodles and eggs.

Especially for marketing employees and staff when working on specified working hours is not counted as overtime but given incentives.

#### **d. Off Work**

Every employee of PT. CCAI Balinusa reserves the right to have annual leave. The terms of annual employee leave are as follows:

- A. Working period of one year to four years: 12 days.
- B. Working period of five years to nine years: 15 days.
- C. Ten-year service period and beyond: 18 days.

Leave can not be taken at once if for no good reason, and the leave can not be accumulated to the next year or if within a year of leave is not taken or not used all the rest of the leave will be forfeited. Annual leave entitlements can not be compensated

in any form, including reimbursement with money. The granting of annual leave is done for the sake of the implementation of employees' annual breaks with their families. In addition to annual leave, female employees also receive other leave such as maternity leave and monthly maternity leave (1.5 months before and 1.5 months postpartum), and 1.5 months of miscarriage leave.

#### **e. Welfare**

PT. CCAI Balinusa guarantees the employee's welfare and safety by including all employees in the Jamsostek (Workers Social Security) program, employee health insurance and one wife and three children who are covered 100% by the company, scholarships for the sons and daughters of outstanding employees, holiday allowance, Grief donation to workers and their families who experienced misfortune or misfortune, happy aid, change of medical expenses arranged by decree (cost of care, maternity, goggles and others), housing (especially for the head section of the top section), clothing And official equipment, leave fund and one month leave for Hajj, bonus / profit sharing which depends on company profit every year, and pension fund.

#### **2.3.3. Marketing**

In addition to acting as a manufacturer and distributor, the company also markets and sells Coca-Cola products through more than 120 sales centers spread throughout Indonesia, ensuring that its products are always available anywhere and anytime. The product is transported by large trucks, then distributed to retailers with smaller vehicles. It is estimated that more than 80% of the company's products are sold through retailers and wholesalers where 90% of them are from the category of small business entrepreneurs. Adapted to the development and market demands until this year PT. CCAI Balinusa has marketing offices include:

- a. Bali: Kuta, Denpasar, Singaraja, Klungkung, Negara and Tabanan.
- b. NTB: Mataram, Sumbawa, and Bima.

PT. Coca-Cola Amatil Indonesia already has over 18000 Coca-Cola product retailers. This makes Coca-Cola products even easier to obtain anywhere with prices that can be reached by all walks of life. From marketing areas that are the target of product distribution. Bali is a strategic and potential area due to the high demand for products, considering Bali is also a tourist area.

#### **2.3.4. Facility**

PT. CCAI Balinusa provides facilities for its employees, in order to improve the welfare of employees who work in this company and can improve employee performance so that production can run smoothly. These facilities include: musholla, clinic, canteen, union, cooperative, sports such as aerobic or tennis court renting, and employee recreation.



## CHAPTER 3

### COMPANY'S SYSTEM OVERVIEW

#### 3.1. The Company's Business Process

The company's business process of PT. Coca-Cola Amatil Indonesia Balinusa generally consists of five stages, they are planning, production, quality control, storage of finished products, and the distribution of finished products. Business process flow PT. Coca-Cola Amatil Indonesia Balinusa is as follows:

- a. Demand and Operational Planning Nasional (Jakarta) make production planning for one week (weekly MPS).
- b. Local Demand and Operational Planning Department (Balinusa) receives weekly MPS from the center which is then processed into daily production plan (daily plan MPS).
- c. Production Department will conduct production based on daily plan MPS, in every stage of production there is quality control activity by Quality Assurance Department.
- d. The products in the form of finished products are submitted to the Warehouse Department to be stored and shipped based on distribution center request.
- e. Distribution centers will ship to stores based on orders made by the Sales Department.

#### 3.2. Product Generated

Products produced from four types of beverage category with 14 trademarks, PT. Coca-Cola Amatil Indonesia Balinusa only produces sparkling beverage category products. PT. Coca-Cola Amatil Indonesia Balinusa has two production lines. The products produced on each line are as follows:

- a. Line 1 Plastic Bottle (Poly Ethylene Terephthalate)
  - i. Coca-Cola 390 ml, 1000 ml, and 1500 ml.
  - ii. Fanta 390 ml, 1000 ml, and 1500 ml.
  - iii. Sprite 390 ml, 1000 ml, and 1500 ml



**Figure 3.1. Products of PT. Coca-Cola Using Plastic Bottle**

b. Line 2 Glass Bottle (Returnable Glass Bottle)

i. Coca-Cola 295 ml, 200 ml, and 193 ml.

ii. Fanta 295 ml and 200 ml.

iii. Sprite 295 ml and 200 ml.

iv. Frestea 220 ml.



**Figure 3.2. Products of PT. Coca-Cola Using Glass Bottle**

### **3.3. Production process**

PT. Coca-Cola Amatil Balinusa produces carbonated beverages. Each process must be in accordance the standards of PT. CCAI and in accordance market demand. Before entering the core production process, there are several units of process that must be passed first. Such as the process of making syrup, water treatment process, mixing process, filling, and packaging. All these processes support each other to get results. Here is an explanation about the production process unit in PT. Coca-Cola Amatil Balinusa.

#### **3.3.1 Production Process**

Unit production process at PT. Coca-Cola Balinusa includes eight processes, namely:

a. Water Management Process

Water treatment process is a way / form of water treatment with the aim to produce water with good quality in accordance with standard production requirements that have been set. This process consists of treated water and softener water.

b. Syrup Making Process

The process of making a syrup consists of two stages, namely the making of a simple syrup and making a finish syrup. This process unit is in charge of making syrup products (fanta, coca-cola, sprite, and frestea) used for the mixing process. This syrup is made from sugar, water, and concentrate.

c. Mixing process

The process of paramix is the process of mixing water, syrup, and CO<sub>2</sub> so as to obtain a soft drink (beverage) that is ready to fill the packaging. Treated water and finish syrup together into the mixing machine.

d. Charging (Filling)

Filling is the process of filling the beverage into empty bottles brought by the conveyor. Filler machine consists of 80 filing valve that serves to drain the beverage into the bottle by using gas pressure.

e. Packaging

The packaging process of this product consists of:

i. Crowning, crowning is the process of closing the bottle with a crown on the product.

- ii. Date coding is one of the steps to facilitate problem tracking, distribution, storage, and enforcing FEFO (First Expired First Out) system.
- iii. Full good inspection, aims to separate defective products, non-standard content, incorrect or missing date coding, broken bottles, no cover / broken cover, empty bottles, and foreign object.
- iv. Cuts and dirt causing contamination.
- v. Case Packer, is a tool that automatically packs RGB products into crates. The bottle containing the CSD is re-inserted in the crates that have been washed in case of a washer.

### **3.3.2 Product Storage**

The product storage process is carried out by classifying according to the type and type of product and aims to facilitate the tracking of finished products in the warehouse and application of the FEFO (First Expired First Out) system. The search for finished warehouse plant products serves to recover the number of products sent to several distribution centers based on flavor. The data recorded consist of date of production, date code, flavor, size, line, number, path number layout, delivery date, number sent, document number, and name of sales center. To ensure the safe handling of finished products, as well as to prevent damage or degradation of quality, all warehouses for finished products must be free from sun, moisture, rainwater, insects, pests, and ventilation for good air exchange. Continuous cleaning of the warehouse area should be done so that the minimum dust level and no water puddles resulting from the dewdrop or crates that have just finished production. At the time of the production process, several things that need to be monitored are:

- a. Bottle is dirty but still good (E4).
- b. The number of crates containing the broken bottle (RL).
- c. Broken bottle before entering washer machine (WP).
- d. Broken bottle after washer (WR).
- e. The bottle is assumed to be broken in the warehouse (WE).

This assumption is due to breaking after the washer process, broken filled or broken in the area of full good inspection. Storage of products must be in accordance with the



standard means make sure the bottle is facing up in accordance with the mark on the box. At the time of storage available space between the pallet movement that serves for inspection of finished products if the possibility of leakage or so forth. If the product is found in wet conditions it is necessary to do quick handling by moving the problematic product into a new cardboard. In addition, if a problem product such as best before product has been found for more than six months, the Quality Assurance Department needs to be notified for further inspection process in the effort to protect, control the product and guarantee the quality of the product so as not to affect the company image. Follow-up of these responsibilities is the examination and testing of the product visually in the warehouse conducted by the Quality Assurance Department once a week on the product after 48 hours of age with the sample used as many as 48 bottles.

### **3.3.3 Distribution of Products**

In the process of product delivery, the general method conducted at PT. Coca-Cola Amatil Indonesia Balinusa is a delivery requirement planning. Delivery requirement planning should arrange and check distribution center and PT. Which Coca-Cola to send. In addition it must ensure that the delivery of finished products is in accordance with the order. Shipper (logistics executives) must control which stock will be loaded onto the truck. Prior to product loading, the shipper and supervisor must obtain delivery information in accordance with the delivery requirement planning and notify the shipper & operator of the quantity and type of product to be shipped. While for shipper and operator must make loading order based on instruction of finish good, empties bottle and PD Supervisor. Loading order comes with flavor, size, path number, quantity, and best before date of the delivered product. And submit a copy of loading order that has been completed to the forklift operator for the collection and loading of the product. The products to be shipped must conform to predefined standards and documents for shipment require has been completed. Delivery center PT. Coca-Cola Amatil Indonesia Balinusa consists of:

- a. DPS: Denpasar
- b. MTR: Mataram
- c. UBD: Ubud
- d. SGR: Singaraja

- e. SBW: Sumbawa
- f. BMA: Bima
- g. DSD: Surabrata, Gilimanuk, State, Tirta Urip, and Nusa Penida
- h. Selong: West Nusa Tenggara

Delivery documents are stored as archives and some are submitted for delivery center. The data that is filled in when delivery is the number of shipped signed by sender, security, and transporter driver. The data that is filled in when receiving the finished product by the delivery center is the number of receive, claim (breakage, leakage, and shortage) signed by the receiver, security, and transporter driver. After receipt of the finished product by the delivery center, then the delivery document is stored for the archive, submitted to the driver, and returned to the delivery center. BTTM serves to find out sooner or later the circulation of bottles from the market back to the warehouse PT. Coca-Cola Amatil Indonesia Balinusa with datecoding monitor. The number of bottles monitored is about two percent of the number of bottles in a pallet for a period of three months.

#### **3.3.4 Waste Management**

Wastewater processed in the Department of Waste Water Treatment Process (WWTP) is a liquid waste treatment done through physical, chemical and biological processes so that the waste produced is not harmful and harmful to the environment. Waste management consists of two types:

- a. Operation of wastewater treatment
  - i. Oil Separator

It consists of one oil separator unit, serves as an oil separator from the effluent and also features a water reservoir.

- ii. Equalization Tub

Capacity for equalization tub is 240m<sup>3</sup>, serves to accommodate the wastewater inlet from the factory. In the equalization parcels completed two aerators used to homogenize waste water by rotating or stirring wastewater. Aerators are also used to increase oxygen because the aerator oxygen spills into the waste water.

### iii. Neutralization Tub

Tub Neutralization is a tub used to neutralize pH. The high average CCBI wastewater pH (6-9) does not need to be neutralized to pH 6 to pH 11 by adding hydrochloric acid (HCl).

### b. Processing in biology and physics

#### i. Tubs Oxidation

All pollutants polluting the waste water after being passed to the oxidation bath will be described by bacteria in the form of sludge active. The process itself proceeds aerobically with the help of two aerators, so it is expected that oxygen in the oxidation bath reaches more than two ppm. To balance the bacterial life in the oxidation tubs added nutrients ie urea and pospat, with BOD ratio: N: P = 100: 5: 1.

#### ii. Secondary Clarifier

The water passed from the oxidation bath to the secondary clarifier will be separated from the sludge in the form of bacterial mass will be deposited to the bottom of the clarifier. Accelerated settling added PAC as coagulant passed on stastic mixing. The mud will settle at the bottom of the clarifier and the liquid, which is already clear water will over flow to the fish pond and accommodated in the storage tank for water reuse process.

#### iii. Sludge Collector Tank

Serves to accommodate sludge from clarifear tank when blow down. Some sludge is processed and then disposed of to the landfill, while others

Returned to the oxidation bath to balance the amount of bacteria in the oxidation bath.

#### iv. Sludge Thickener

Sludge thickener is a tank to concentrate or compact sludge with settling system. The sludge is then passed to the sludge dryer unit.

#### v. Decanter Separation and Milling Sludge

Sludge dryer machine for easy disposal to the place of disposal. The machine works centrifugally. The sludge passed from the sludge thickener tank is processed centrifugally. Machine decanter, then sludge that has dried or in the form of paste

accommodated on barrel and collected in reservoir. After full and then discharged to the dump by the agency pity and landscaping.

vi. Fish Pond

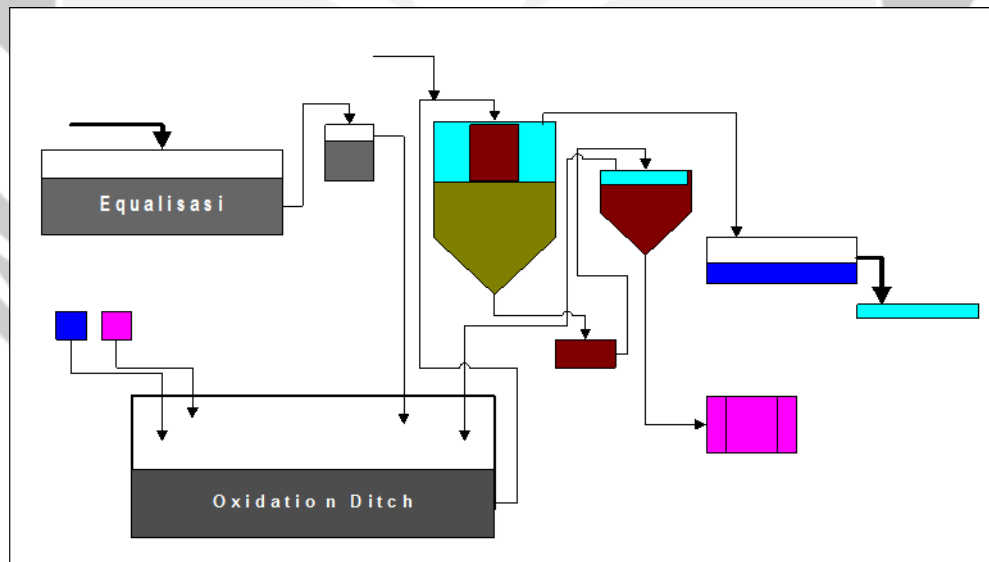
A pool to hold clear water. It is a tub of life control, that is, with the belief that fish live in ponds. Water from the processing process has met the requirements with the life of fish in the pond. So the water lagoon worth to be thrown into the river.

vii. Dewatering Lagoon

Lagoon drained with a view to maintaining cleanliness. If the lagoon looks dirty or a lot of mud and moss, and if there is out of spech parameters it will be done draining. Water per flow calrifier is shut down by shutting down WWTP operations, while water and lagoon sludge are returned to the equalization basin.

viii. River

An irrigation channel located next to the lagoon control, as the recipient of water over this can already be guaranteed security, especially against the biota of water that lives in the river.



**Figure 3.3. Waste Management Process Series**

### 3.3.5 Sanitation

In maintaining the quality of products produced, then the process of processing is a part that plays an important role in the soft drink industry. Sanitation is an absolute requirement that must be done for the food industry and soft drinks in particular very directly and indirectly affect the quality of food and endurance products, as well as good name or corporate image. The success of the company in dealing with food products is one of them can be seen from the implementation of sanitation company, this includes the habits, attitudes, and aseptic actions against objects including humans who will be direct and indirect contact with food products. Sanitation activities at PT. Coca-Cola Amatil Indonesia Balinusa aims to reduce or prevent microbial growth that can degrade product quality and to eliminate odors in equipment.

The process of sanitation is done every change over flavor, before production and after production. As for equipment such as tanks or pipes with newly installed stainless steel and will be used must be passivation in advance to remove the grams of metal so it will not contaminate the product. Operation of cleaning and sanitation implementation refers to the work instruction that has been set. The Quality Assurance department is responsible for monitoring and verifying the cleaning and sanitation processes. Besides each supervisor, syrup, and production controlling the implementation of cleaning and sanitation. In addition to sanitation and cleaning is also conducted monitoring of sanitation and other cleaning, including:

- a. Cleaning equipment is used to remove crust on equipment and to prevent rust on equipment.
- b. Cleaning the equipment with lime away to remove the thick crust on the external equipment.
- c. Sanitation using teepol is used to provide exterior and floor equipment.
- d. Sanitary room using vortex is used to kill microorganisms, especially yeast, mold, and anti-microbial spores on freestanding room equipment.
- e. Passivation of equipment on new stainless steel equipment after welding.
- f. Sanitation with disinfectant for floor in filling room area and rear bottling.

### 3.4. Production Facilities

PT. Coca-Cola Amatil Indonesia Balinusa as a multi-national company of course has many facilities that support the production process from water treatment, syrup making, bottling, to waste processing. In this section we will describe facilities in the production department that support bottling and material handling processes.

a. Facilities provides in the production room are:

- i. Machine uncaser
- ii. Case washer
- iii. Bottle washer
- iv. Conveyor belt
- v. Electronic bottle inspection
- vi. Optiscan
- vii. Filler machine
- viii. Crouner machine
- ix. Case packer
- x. Blow mold machine
- xi. Date coding machine
- xii. Labeling machine
- xiii. Packaging machine

b. Material handling facilities located at PT. Coca-Cola Balinusa :

- i. Hand pallet
- ii. Forklift
- iii. Pallet
- iv. Trolley
- v. Truck

## CHAPTER 4

### REVIEW OF STUDENT OCCUPATIONS

This chapter contains an overview of student work comprising of the scope of work, responsibilities and authority in the work, the methodology of implementation of the work and the results obtained after doing practical work.

#### 4.1. Scope of work

Practical work activities start from July 13, 2017 until August 05, 2017 at PT.CCAI Balinusa, namely the Department of Occupational Safety and Health (OSH). The scope of work of this department is to ensure the safety and health of its workers. Safety and health insurance is implemented for prevention of potential hazards in the work area, so workers are required to use Personal Protective Equipment (PPE), and comply with the existing signs within the plant to avoid working hazards.

**Table 4.1. Internship Schedule**

<b>No</b>	<b>Description</b>	<b>Fasilitator</b>	<b>Time</b>
1	<i>Induction CCBI Management system (QMS, EMS), sejarah Coca-Cola, proses produksi , struktur organisasi</i>	IGP Sukarya	July 3 <sup>rd</sup> , 2017
2	<i>Water Treatment Process</i>	Sukarsa / Regig	July 6 <sup>th</sup> – 8 <sup>th</sup> , 2017
3	<i>Syrup making Process</i>	Sukarsa / Regig	July 10 <sup>th</sup> – 12 <sup>th</sup> , 2017
4	<i>Waste Water Treatment Process (WWTP)</i>	Sukarsa / Regig	July 3 <sup>rd</sup> – 5 <sup>th</sup> , 2017
5	<i>Bottling Process (washing, mixing, filling, inspection, packing)</i>	Dirgayasa Suwendra Partika	July 13 <sup>rd</sup> – 22 <sup>th</sup> , 2017

**Continue Table 4.1.**

6	Quality Assurance Control from Incoming until marketing & Sanitation	Ngakan	July 24 <sup>rd</sup> – 29 <sup>th</sup> July, 2017
7	Human Resources	I B Udiana	July 31 <sup>st</sup> – August 1 <sup>st</sup> , 2017
8	Demand Operational Planning	Aga	August 2 <sup>nd</sup> 2017
9	Warehousing & Product Distribution	Rusyanta	August 3 <sup>rd</sup> – 4 <sup>th</sup> 2017
10	Report Evaluation	IGP Sukarya	August 5 <sup>th</sup> 2017

#### **4.2. Responsibility and Authority in Work**

On the first day of the implementation of practical work on July 3<sup>rd</sup> 2017, students were briefed by Mr. IGP Sukarya as SC Trainer and field supervisor. Students are given an explanation of the company's orientation, as well as direction to do the work, to comply with existing regulations. Students are also invited to get around the plant to know the condition of work environment. Students are also given a schedule to alternately occupy six departments in the company in turn each week from one department to another department. However, time constraints require us only a few days in each department on a predetermined schedule. During the implementation of practical work, students are authorized and given allowance by supervisors, such as :

- a. It is allowed to observe the work system on all units, and is allowed to take pictures (photos or videos).
- b. It is allowed to retrieve data and extract the required information.
- c. Allowed to conduct interviews and establish relationships with employees.
- d. Allowed to use office facilities in accordance with the work provided.

#### **4.3. Work Implementation Methodology**

Data needed in conducting field studies and compiling the results of field studies were collected using several methods, such as :



a. Field observation

This method is done by directly reviewing the processes, instruments, work patterns and daily conditions in the field.

b. Interview

This method is done by conducting interviews directly to the parties involved in the field to get a picture of real conditions in the field.

c. Study of literature

This method is done by studying literature sources such as related references, daily reports, and archives in the field.

#### 4.4. Working Result

The results of the work obtained during carrying out practical work in PT.CCAI Balinusa mainly work focused on Demand Operational Planning, Logistic and Supply Chain. The Coca-cola Company is a company engaged in the beverage industry.

##### 4.4.1. Supply Chain Of PT. CCAI Balinusa

Supply chain management is a set of approaches utilized to efficiently integrate suppliers, manufactures , warehouses and stores , so that merchandise is produced and distributed at the right quantities, to the locations, at the right time in order to minimize system wide cost while service level requirement. ( David Simchi Levi et al.,2000 ). From the definition, it can be said that supply chain is logistic network. In this connection, there are several elements (the main actors) which are companies that have the same interests, namely: Suppliers, manufactures, distributions, retail outlets and customers.

##### Illustration of Supply Chain structure of PT. CCAI Balinusa



##### 4.4.1.1. Upstream Supply Chain

The upstream supply chain in CCAI Balinusa Plant includes activities of a manufacturing company with suppliers, such as suppliers of ingredient material, Suppliers of Auxiliary material and suppliers of packaging material.

**a. Ingredients Material and Supplier**

Ingredients Material are the basic materials used in the manufacturing process. The main raw material used in CCBI BaliNusa Plant to produce are sugar, concentrate, tea leaves and CO<sub>2</sub>.

**Table 4.2. List of Ingredients Material and Suppliers**

Ingredients Material	Suppliers
Concentrate	CCAI Jakarta
CO <sub>2</sub> Liquid	PT. Molindo Inti Gas , Malang
CO <sub>2</sub>	PT. Molindo Inti Gas ,Malang
Gula	PT. Sugar Labintha , Lampung
Tea Leaves ( Jasmine)	PT. Gudang Cakra , Bandung

**b. Auxiliary materials**

The auxiliary material is an ingredient in the production process with a lighter percentage of the main material and cannot be clearly distinguished in the final product. Auxiliary materials used in CCBI BaliNusa Plant are:

**Table 4.3. List Of Auxiliary Materials and Suppliers**

Auxiliary Materials	Suppliers
NaCl	CV Dinamika Utama teknik
Filter Catridge	PT.Golden Filterindo S
FeSO <sub>4</sub>	PT. Nebraska Pratama
Ca(OH) <sub>2</sub>	PT. Aneka Kimia Inti
Activated Carbon	PT. Sarana Karya Putera Mandiri
Ca(OCl) <sub>2</sub>	PT. Halim Sakti Pratama
Asam phosphate	: PT.Rolimex Kimia Nusammas

**Continue Table 4.3.**

PAC (Poly Alumunium Chloride )	PT. Fajar Pratama Prima Kimia, Denpasar
Pelumas Konveyor	PT. Indo Chem Semesta
Asam sitrat	CV.Sari Dewata Mandiri, Denpasar
HCl	CV.Sari Dewata Mandiri, Denpasar
Filter Aid	PT. Lautan Luas
Glycol	PT. Fajar Pratama Prima Kimia, Denpasar
NaOH (Caustic Soda)	PT. Surya Makmur Agung Lestari

**c. Packaging Material**

Packaging materials are the materials needed to improve the quality of a product or material that can be seen at the end of the product. Additional ingredients in the beverage production process contained in PT CCBI BaliNusa Plant are generally required in the packing process, namely :

**Table 4.4. List of Packaging Material and Suppliers**

<b>Packaging Material</b>	<b>Suppliers</b>
RGB (Returnable Glass Bottle)	PT. I-Glass Jakarta
PET (Poly Ethylene)	PT DynaPlast , Karawaci
Crown	PT. Lecapseal Indonesia ,Bekasi
Label	PT. Lawangmas Primapack Indonesia , Malang
Carton Layer	PT. Supracor Sejahtera , Mojokerto
Barcode	CV Mersi Advertising, Jakarta Timur
Shrink Wrap ( Plastic )	PT. Lawangmas Primapack Indonesia , Malang

#### 4.4.1.2. Downstream Supply Chain

Downstream supply chain includes all activities that involve the delivery of products to end customers. In business development, PT. CCAI Balinusa has distributed products throughout Bali, Nusa Tenggara Barat and Nusa Tenggara Timur through Mega Distribution Center Sempidi, Ubud and Mataram to distributors, outlets and retailers. Besides distributing, also take back the empty bottles (RGB - Returnable Glass Bottle).

**Illustration Of Downstream Supply Chain**



HUB or Mega Distribution Center is the center of all distribution center In Bali ,which is handle all the products that will delivery from other CCAI Plant in Indonesia to Bali Province or from CCAI Balinusa Plant to their distribution area. HUB in Bali Province is located in Tabanan (DC Sempidi ).

Product Distribution process is handle by 3 departments in Tabanan Office which are Supply Chain (DOP), Warehouse and Distribution Center. These 3 department integrated to each other in distribution process.

##### **a. Order & Distribution Process**

In Order Process, started when Salesman make the order through the application (e-Coaching ) and the order will integrated with the system and Supply Planner will check the order and dispatch according to variety and quantity of the product and sent by email to Distribution Center and will handle by Logistic department team to arrange the order according to load capacity and type of transportation that will use to delivery the products. Logistic team coordinate to warehouse to prepare the order. Procurement of product in warehouse handle by third-party “Wira Logistic” to provide Human Resources. Document that used is Los List which contain information about load capacity, type of product, and delivery which type of transportation.

In providing products warehouses team will update in System Query about product life by applying FEFO (First expired First Out) where the goods are first expired to be sent

first. After the products are ready to make delivery according to order, Logistic team will update again the quantity of the product remains in system Query and then DC team will make invoice and delivery document and products are ready to deliver.

#### **b. Transportation Process**

In this process, the product will be deliver by the driver use truck. The driver will bring the invoice and also delivery document that provide by DC team.

In this process CCAI Balinusa work with third-party by providing transportation with differences type of truck to make delivery to distribution area of CCAI Balinusa , which is handle by PT. Istana Kencana Makmur. Here are type of transportation that provide by the third-party to make delivery to other Distribution Center :

**Table 4.5. List of Type Of Trucks Using**

Type of Truck	Load Capacity
L300	960 kg
CDE	3000 kg
CDD	6000 kg
Fuso	14000 kg
BU Wing Box	23000 kg

For delivery in small number of load capacity , Distribution Center will use PT. CCAI truck , which in HUB it contains 7 truck, which mostly provide delivery to retailers or Hotel.

#### **c. Warehousing**

The product storage process is carried out by classifying according to the type and type of product and aims to facilitate the tracking of finished products in the warehouse and application of the FEFO (First Expired First Out) system. The search for finished warehouse plant products serves to recover the number of products sent to several distribution centers based on flavor. The data recorded consist of date of production, date code, flavor, size, line, number, path number layout, delivery date, number sent, document number, and name of sales center.

In handling the warehouse in HUB ( Mega Distribution Center ) PT. CCAI Balinusa helped by third-party "Wira Logistic" . For material handling process, operator in warehouse using Pallet, Hand-Pallet , Trolley and forklift. To be being PT. CCAI Balinusa third-party , Logistic Company will follow a tender that given and chosen by PT. CCAI Jakarta ( National ) and allocate to each Branch CCAI Plant in Indonesia .



## **CHAPTER 5**

### **CONCLUSIONS AND SUGGESTIONS**

#### **5.1 Conclusions**

Based on the result of work placement activity , there are several conclusion :

1. Company assign Student to learn overall the work process done in Demand Operational Planning Department, Logistic and Supply chain due to no special project given.
2. Demand Operational Planning to make schedule and ensure the supply of goods needed by market is available in warehouse.
3. Warehouse department to keep and receive the product from Plant.
4. The Main ingredients/raw material supplied by National Plant PT.CCAI in Jakarta.
5. The Auxiliary Material and Packaging Materials supplied by third-party company from different company in different city in Indonesia.
6. Warehousing process handled by third-party company named Wira Logistic.
7. Transportation process handled by PT. CCAI Balinusa and also helped by third-party company named PT.Istana Kencana Makmur.

#### **5.2 Suggestions**

PT. CCAI Balinusa as one of the Indonesian national companies that should be appreciated in its performance. In the future, PT. CCAI Balinusa rays can still maintain its lead in the field of beverage manufacturers while maintaining and improving supply chain-management strategies.

PENILAIAN KERJA PRAKTEK OLEH PEMBIMBING/SUPERVISOR LAPANGAN  
KERJA PRAKTEK PROGRAM STUDI TEKNIK INDUSTRI,  
UNIVERSITAS ATMA JAYA YOGYAKARTA

Nama Mahasiswa : Esterania Pinto Guterres  
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Divisi/Departemen/Area Kerja : Demand Planning Operational Logistic & Supply chain  
Waktu Pelaksanaan : 03 Juli 2017 - 05 Agustus 2017

Mohon Bapak/Ibu pembimbing lapangan memberikan penilaian atas prestasi mahasiswa peserta kerja praktek sesuai dengan aspek penilaian di bawah ini. Nilai terendah adalah 1 dan nilai tertinggi adalah 10.

No.	Aspek Penilaian	Nilai (1 - 10)
1.	Kedisiplinan	9
2.	Motivasi kerja	9
3.	Tanggung jawab	9
4.	Kerjasama dengan rekan sekerja	8
5.	Sopan santun dan tata krama	9
6.	Daya tangkap dan pemahaman terhadap tugas yang diberikan	9
7.	Kemampuan melaksanakan dan menyelesaikan tugas	9
8.	Keterampilan dalam menggunakan peralatan kerja	8
9.	Perawatan terhadap peralatan kerja	8
10.	Perhatian terhadap keselamatan kerja	9

Mengwi 05 Agustus 2017

Pembimbing/Supervisor Lapangan,

(151515) Riko Sukarya

Catatan:



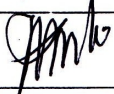

- Nilai pada setiap aspek dikategorikan dalam peringkat sangat baik (nilai nominal: 9-10), baik (7-8), cukup (5-6), kurang (3-4), dan sangat kurang (1-2).
- Pembimbing/Supervisor Lapangan dimohon mengisi blanko penilaian ini apabila mahasiswa yang bersangkutan telah menyelesaikan Laporan Kerja Praktek di Perusahaan.
- Mahasiswa yang tidak menyerahkan blanko nilai yang sudah terisi oleh pembimbing lapangan tidak akan menerima nilai akhir Mata Kuliah Kerja Praktek.



Lampiran 2. Lembar Bimbingan Pelaksanaan dan Penyusunan Laporan Kerja Praktek

**Program Studi Teknik Industri Universitas Atma Jaya Yogyakarta**  
**Lembar Bimbingan Pelaksanaan dan Penyusunan**  
**Laporan Kerja Praktek**

Nama Mahasiswa : ESTEFANIA PINTO GUTERRES  
 NPM : 131407507  
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 Tanggal pelaksanaan KP : 03 Juli 2017 - 05 Agustus 2017  
 Dosen Pembimbing : Ir. B. KRISTYANTO, M.ENG., Ph.D

No	Tanggal	Agenda	Tanda Tangan Dosen Pembimbing
1	16-06/2017	Penyerahan surat pembimbingan dan Konsultasi persiapan Kerja Praktek	
2		Laporan atau konsultasi tugas dari perusahaan	
3	15/08-2017	Laporan pertama setelah pelaksanaan Kerja Praktek dan konsultasi penyusunan laporan	
4	26/01-2018	Revisi	
5	29/01-2018	Penyerahan draft laporan Kerja Praktek untuk pertama kali	
6	29/01-2018	Pengesahan laporan Kerja Praktek	